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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,839	02/26/2004	Brian Acton	50269-0567	8233

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EXAMINER

MAHMOUDI, HASSAN

ART UNIT	PAPER NUMBER
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2165

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/789,839	Applicant(s) ACTON ET AL.	
	Examiner Tony Mahmoudi	Art Unit 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 7, 10-14, 16, 17 and 20 is/are rejected.
- 7) ☒ Claim(s) 5, 8, 9, 15, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/6/2004 & 10/16/2006</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 11-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 11-20 of the instant Application recite, “a machine readable medium carrying one or more sequences of instructions”, which based on the definition and examples provided in the specification of the instant Application, represent non-statutory subject matter.

The Specification, starting at page 20, paragraph 72 states:

“[0072] The term “machine-readable medium” as used herein refers to any medium that participates in providing data that causes a machine to operation in a specific fashion. In an embodiment implemented using computer system 500, various machine-readable media are involved, for example, in providing instructions to processor 504 for execution. Such a medium may take many forms, including but not limited to, non-volatile media, volatile media, and ***transmission media***. Non-volatile media includes, for example, optical or magnetic disks, such as storage device 510. Volatile media includes dynamic memory, such as main memory 506. ***Transmission media includes coaxial cables, copper wire and fiber optics, including the wires that comprise bus 502. Transmission media may also take the form of acoustic or light waves, such as those generated during radio-wave and infra-red data communications.***

[0073] Common forms of machine-readable media include, for example, a floppy disk, a flexible disk, hard disk, magnetic tape, or any other magnetic medium, a CD-ROM, any other optical medium, ***punchcards, papertape, any other physical medium with patterns of holes***, a RAM, a PROM, and EPROM, a FLASH-EPROM, any other memory chip or cartridge, ***a carrier wave*** as described hereinafter, or ***any other medium*** from which a computer may read.

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Transmission media and carrier waves, as described above (boldfaced), are non-statutory subject matter. Signals are forms of energy, and therefore, non-statutory.

Appropriate corrections are required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 6-7, 10-14, 16-17, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Garner et al (U.S. Publication No. 2004/0093331 A1, hereinafter, Garner.)

As to claim 1, Garner teaches a method for selecting a scoring mechanism from a plurality scoring mechanisms for processing queries (see paragraphs 8, 12, and 23), comprising the steps of:

for each scoring mechanism of said plurality of scoring mechanisms, determining, based on a query, multiple parameter values for the scoring mechanism, wherein each parameter

value of said multiple parameter values indicates a different characteristic associated with using said scoring mechanism for processing said query (see paragraphs 18, 23, and 145);

for each scoring mechanism of said plurality of scoring mechanisms, generating a score based on the multiple parameter values determined for the scoring mechanism (see paragraphs 24, 56, and 182); and

selecting which scoring mechanism to use to process said query based on the score generated for each scoring system (see paragraphs 12, 27, and 200.)

As to claim 2, **Garner** teaches wherein the multiple parameters values (see paragraphs 18, 23, and 145) comprise a relevance parameter that reflects the relevance of results that would be produced by the scoring mechanism for said query, density of sponsored product items within results that would be produced by using the scoring mechanism to process said query (see paragraphs 24 and 182), and a user retention parameter that estimates the likelihood that a user that issued said query will find the results useful (see paragraphs 84, 91, and 115.)

As to claim 3, **Garner** teaches wherein the multiple parameter values comprise a relevance parameter value and the relevance parameter value is determined for each scoring mechanism of said plurality of scoring mechanisms by having a human grade the results produced by each scoring mechanism for one or more sample queries (see paragraph 162).

As to claim 4, **Garner** teaches further comprising the step of determining a relevance parameter value for each scoring mechanism for each category of a plurality of product item categories (see paragraphs 15 and 70), wherein each product item category of the plurality of product item categories is selected from the group consisting of a product category, a merchant category, and a product abstraction category (see paragraph 120.)

As to claim 6, **Garner** teaches wherein one of the multiple parameter values is a density of sponsored product items parameter value and the density of sponsored product items parameter value is determined based on potential revenue that would be generated by using the result set that would be produced for said query by using each scoring mechanism of said plurality of scoring mechanisms (see paragraphs 87 and 163.)

As to claim 7, **Garner** teaches wherein said query is a query received by a search mechanism and one of the multiple parameter values is a user retention parameter value generated for each scoring mechanism of said plurality of scoring mechanisms and the user retention parameter value is generated for the scoring mechanism based on a percentage users that return to a website associated with said search mechanism within a predetermined time span after receiving results generated by the scoring mechanism (see paragraphs 50, 95, 167, and 276.)

As to claim 10, **Garner** teaches wherein the step of selecting a scoring mechanism from said plurality of scoring mechanisms comprises performing a functional composition of the

parameter values wherein the functional composition is selected from the group consisting of a product of parameter values and a product of squares of parameter values (see “statistical” and “observation” parameters in paragraphs 208 and 277.)

As to claims 11-14, 16-17, and 20, **Garner** teaches a machine-readable medium carrying one or more sequences of instructions (see paragraphs 25 and 26) which, when executed by one or more processors (see paragraph 109), causes the one or more processors to perform the method recited in claims 1-4, 6-7, and 10 respectively (the Applicant is kindly directed to the remarks and discussions made for claims 1-4, 6-7, and 10 above.)

Allowable Subject Matter

5. Claim 5, 8-9, 15, and 18-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of art with respect to methods and systems of Query optimization, Query Ranking, and Query Selection in general:

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Patent/Pub. No.	Issued to
US 5,815,689	Shaw et al.
US 2004/0249831 A1	Fagin et al.
US 7,117,207 B1	Kerschberg et al.

7. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (571) 272-4078. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached at (571) 272-4146.

February 28, 2007



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